

ABSTRACT

Disclosed is a CVD ozone (O₃) deposition process, with the preferred embodiment comprising the steps of disposing a substrate in a chemical vapor deposition chamber and exposing the substrate surface to a SiO₂ precursor gas, a carrier gas, and 5 optionally a dopant gas in the presence of ozone and exposing the reaction volume of the gases above the substrate surface to a high intensity light source, to increase the functional atomic oxygen concentration and reduce the fixed charge in the deposited films.